## CLAIMS

1. A method of forming a wafer stack comprising:

providing a first wafer having a first plurality of metalized trenches on a surface;

providing a second wafer having a second plurality of metalized trenches on a surface facing said first wafer; and

solder bonding said first plurality of metalized trenches to said second plurality of metalized trenches.

2. The method of claim 1, wherein solder bonding comprises providing solder on at least each of said first plurality of metalized trenches.

3. The method of claim 2, wherein solder bonding further comprises providing solder on at least each of said second plurality of metalized trenches.

4. The method of claim 2, wherein said solder is provided by electroplating.

5. The method of claim 2, wherein said solder is provided by electroless plating.

6. The method of claim 2, wherein solder bonding further comprises providing a barrier layer on said first plurality of metalized trenches prior to providing said solder.

7. The method of claim 6, wherein said barrier layer comprises one of cobalt, nickel, tantalum and titanium.

8. The method of claim 1, wherein solder bonding comprises heating at least said solder to cause reflow.

9. The method of claim 1, wherein said solder comprises lead-free solder.

10. The method of claim 1, wherein said solder comprises lead based solder.

11. A method of forming a wafer stack comprising:

applying solder to metalized areas on a first wafer;

applying solder to metalized areas on a second wafer; and

bonding said metalized areas on said first wafer to metalized areas on said second wafer by heating said solder.

12. The method of claim 11, wherein said bonding comprises pressure bonding said first wafer to said second wafer.

13. The method of claim 11, wherein bonding comprises heating said solder such that said solder on said first wafer electrically contacts said solder on said second wafer.

14. The method of claim 11, wherein said solder is heated to a temperature greater than a melting temperature of said solder.

15. The method of claim 11, further comprising providing a barrier layer on said metalized areas prior to applying solder to said metalized areas of said first wafer.

16. The method of claim 15, wherein said barrier layer comprises one of cobalt, nickel, tantalum and titanium.

17. The method of claim 11, wherein said solder comprises lead-free solder.

18. The method of claim 11, wherein said solder comprises lead based solder.

19. A wafer stack comprising:

a first wafer having a first plurality of metalized trenches on a first surface;

a second wafer having a second plurality of metalized trenches on a surface of said second wafer; and

a plurality of solder masses each provided between one of said first plurality of metalized trenches and a corresponding one of said second plurality of metalized trenches to electrically connect each of said plurality of metalized trenches with said corresponding one of said second plurality of metalized trenches.

20. The wafer stack of claim 19, wherein each of said first plurality of metalized trenches comprise a metal provided within a corresponding trench and a barrier layer formed on said metal.

21. The wafer stack of claim 20, wherein said barrier layer comprises one of cobalt, nickel,

tantalum and titanium.